

WHAT IS CLAIMED IS:

1. An electrostatic latent image developing dry toner composition that is used for forming images on both sides of a recording material,  
5 wherein said toner contains calcium compound particles, and the amount W of said calcium compound particles added and the size d of said calcium compound particles meet the requirement of  $5 < W/d < 500 \dots (1)$  (W: ratio to the total amount of toner (% by weight), d: volume average particle size ( $\mu\text{m}$ )).

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2. The electrostatic latent image developing dry toner composition according to claim 1, wherein said toner contains a release agent.

3. The electrostatic latent image developing dry toner composition  
15 according to claim 1, wherein the size of said calcium compound particles is 5 to 70 nm.

4. The electrostatic latent image developing dry toner composition according to claim 1, wherein said calcium compound particles are  
20 calcium carbonate particles.

5. The electrostatic latent image developing dry toner composition for double-sided copying according to claim 1, wherein said calcium compound particles are surface-treated.

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6. The electrostatic latent image developing dry toner composition according to claim 1, wherein said toner is a toner having an average shape factor SF1 of 100 to 140:

$$SF1 = (ML^2/A) \times (\pi/4) \times 100$$

where ML is the absolute maximum length of the toner, A is the projector area of the toner, and they are determined as values by analyzing mainly a microscopic image or scanning electron microscopic image using an image analyzing apparatus.

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7. The electrostatic latent image developing dry color toner composition according to claim 1, wherein said toner is a color toner.

10 8. An electrostatic latent image developing dry toner composition having as components at least a binder resin having a molecular distribution Mw/Mn of 3 to 15 and a colorant,

wherein said toner contains 10 to 60 parts by weight of calcium compound particles based on the total amount of said toner.

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9. The electrostatic latent image developing dry toner composition according to claim 8, wherein said calcium compound particles are surface-treated to impart a hydrophobic nature.

20 10. The electrostatic latent image developing dry toner composition according to claim 8, wherein said calcium compound particles are calcium carbonate particles.

11. A developer for electrostatic latent image development  
25 constituted by a carrier and a toner composition, wherein said carrier has on a core material a coat resin layer having a conductive material dispersed in a matrix resin, said toner composition is used for forming images on both sides of a recording material, and contains calcium compound particles, and the amount W of the calcium compound

particles added and the size  $d$  of the calcium compound particles meet the requirement of  $5 < W/d < 500 \dots (1)$  ( $W$ : ratio to the total amount of toner (% by weight),  $d$ : volume average particle size ( $\mu\text{m}$ )).

5 12. An image forming method for forming an image using an image forming apparatus comprising charge means for charging an electrostatic latent image holding member, latent image processing means for forming an electrostatic latent image on the charged latent image holding member by exposing the same to light, developing means  
10 for developing said electrostatic latent image using a toner, transfer-separate means for transferring a formed toner image to a recording material to separate the toner image from the latent image holding member being a toner image holding member, and fixation means for contact heat-fixing the transferred toner image on the  
15 recording material,

wherein said toner contains calcium compound particles, and the amount  $W$  of said calcium compound particles added and the size  $d$  of said calcium compound particles meet the requirement of  $5 < W/d < 500 \dots (1)$  ( $W$ : ratio to the total amount of toner (% by weight),  
20  $d$ : volume average particle size ( $\mu\text{m}$ )), and

the surface layer of said latent image holding member has a charge transport property, and is constituted by a siloxane based resin having a crosslinked structure.

25 13. The color image forming method according to claim 12, wherein said transfer-separate means develop the toner of each color on the latent image holding member, transfer the developed toner to a transferring belt or transferring drum, and then transfer the toner of each color to a transferring member at a time.

14. The color image forming method according to claim 12, wherein said fixation means are fixation means supplying substantially no release agent.

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15. An image forming method for forming an image using an image forming apparatus comprising charge means for charging an electrostatic latent image holding member, latent image processing means for forming an electrostatic latent image on the charged latent  
10 image holding member by exposing the same to light, developing means for developing said electrostatic latent image using a toner, transfer-separate means for transferring a formed toner image to a recording material to separate the toner image from the latent image holding member being a toner image holding member, cleaning  
15 means for removing a toner remaining on the toner image holding member after the toner is transferred, and fixation means for contact heat-fixing the transferred toner image on the recording material, wherein said toner contains calcium compound particles, and the amount W of said calcium compound particles added and the size  
20 d of said calcium compound particles meet the requirement of  $5 < W/d < 500 \dots (1)$  (W: ratio to the total amount of toner (% by weight), d: volume average particle size ( $\mu\text{m}$ )), the surface layer of said latent image holding member has a charge transport property, and is constituted by a siloxane based  
25 resin having a crosslinked structure, and said cleaning means collect the residual toner on the latent image holding member using an electrostatic brush without scraping the latent image holding member.

16. A double-sided color image forming method for forming an image using a double-sided image forming apparatus comprising charge means for charging an electrostatic latent image holding member, latent image processing means for forming an electrostatic latent image  
5 on the charged latent image holding member by exposing the same to light, developing means for developing said electrostatic latent image using a toner, transfer-separate means for transferring a formed first toner image to a first face of a recording material to separate the toner image from the latent image holding member  
10 being a toner image holding member, and transferring a formed second toner image to a second face of the recording material to separate the toner image from said latent image holding member, and fixation means for contact heat-fixing the transferred first and second toner images to the first and second faces of the recording material one  
15 after another,

wherein the toner for use in said image forming method contains calcium compound particles, and the amount  $W$  of said calcium compound particles added and the size  $d$  of said calcium compound particles meet the requirement of  $5 < W/d < 500 \dots (1)$  ( $W$ : ratio to the total amount  
20 of toner (% by weight),  $d$ : volume average particle size ( $\mu\text{m}$ )), and

said transfer-separate means develop the toner of each color on said latent image holding member, transfers the toner to a transferring belt or transferring drum, and then transfers at a time the toner of each color to the first face and the second face  
25 of the recording material.

17. A double side image forming method for forming an image using a double side image forming apparatus comprising charge means for charging an electrostatic latent image holding member, latent image

processing means for forming an electrostatic latent image on the charged latent image holding member by exposing the same to light, developing means for developing said electrostatic latent image using a toner, transfer-separate means for transferring a formed  
5 first toner image to a first face of a recording material to separate the toner image from the latent image holding member being a toner image holding member, and transferring a formed second toner image to a second face of the recording material to separate the toner image from said latent image holding member, cleaning means for  
10 removing a toner remaining on the toner image holding member after the toner is transferred, and fixation means for contact heat-fixing the transferred first and second toner images to the first and second faces of the recording material one after another,

wherein said toner has an average shape factor SF1 of 100 to  
15 140, at least said toner contains calcium compound particles, and the amount W of said calcium compound particles added and the size d of said calcium compound particles meet the requirement of the above formula (1), and

said cleaning means collect the residual toner on the latent  
20 image holding member using an electrostatic brush without scraping the latent image holding member.

18. A double side image forming method for forming an image using a double side image forming apparatus collecting a residual toner  
25 on a latent image holding member in a developing device without scraping the latent image holding member with a blade,

wherein said toner has an average shape factor SF1 of 100 to 140, at least said toner contains calcium compound particles, and the amount W of said calcium compound particles added and the size

d of said calcium compound particles meet the requirement of the above formula (1).

19. A double side image forming method for forming an image using  
5 a double side image forming apparatus comprising charge means for  
charging an electrostatic latent image holding member, latent image  
processing means for forming an electrostatic latent image on the  
charged latent image holding member by exposing the same to light,  
developing means for developing said electrostatic latent image  
10 using a toner, transfer-separate means for transferring a formed  
first toner image to a first face of a recording material to separate  
the toner image from the latent image holding member being a toner  
image holding member, and transferring a formed second toner image  
to a second face of the recording material to separate the toner  
15 image from said latent image holding member, cleaning means for  
removing a toner remaining on the toner image holding member after  
the toner is transferred, and fixation means for contact heat-fixing  
the transferred first and second toner images to the first and second  
faces of the recording material one after another,

20 wherein said fixation means are fixation means supplying no  
release agent, and

said toner has an average shape factor SF1 of 100 to 140, at  
least said toner contains calcium compound particles, and the amount  
W of said calcium compound particles added and the size d of said  
25 calcium compound particles meet the requirement of the above formula  
(1).